



U.S. Department
of Transportation
**Research and
Special Programs
Administration**

SEP 11 2000

400 Seventh St., S.W.
Washington, D.C. 20590

DOT-E 10664
(FOURTH REVISION)

EXPIRATION DATE: August 31, 2002

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Structural Composites Industries, (SCI)
Pomona, California

2. PURPOSE AND LIMITATIONS:

This exemption authorizes the manufacture, mark, sale and use of a non-DOT specification fully wrapped carbon-fiber reinforced aluminum lined cylinders for the transportation in commerce of the materials authorized by this exemption. This exemption provides no relief from any Hazardous Materials Regulation (HMR) other than as specifically stated herein.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.302(a)(1), 173.304(a)(1) and 175.3 in that non-DOT specification cylinders are not authorized, except as specified herein.
5. BASIS: This exemption is based on the application of Structural Composites Industries dated July 10, 2000, submitted in accordance with § 107.109.

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6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Material Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Air, compressed (containing up to 39% by volume oxygen content)	2.2	UN1022	N/A
Argon, compressed	2.2	UN1006	N/A
Carbon Dioxide, compressed	2.2	UN1013	N/A
Helium, compressed	2.2	UN1046	N/A
Hydrogen, compressed	2.1	UN1049	N/A
Methane, compressed or Natural gas, compressed	2.1	UN1971	N/A
Nitrogen, compressed	2.2	UN1066	N/A
Oxygen, compressed	2.2	UN1072	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Packaging prescribed is a fully wrapped carbon-fiber reinforced aluminum lined cylinder made in conformance with the Basic Requirements for Fully Wrapped Carbon-Fiber Reinforced Aluminum Lined Cylinders (DOT-CFFC) (Third Revision), dated March 1999, contained in Appendix A of this exemption except for the following:

CFFC-3 SERVICE LIFE -

* * *

1. The exemption holder must submit a Service Life Extension Plan no later than six months after the issue date of this exemption.

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b. TESTING -

(1) Each cylinder must be reinspected and hydrostatically retèsted every thrèe years in a water jacket suitable for the determination of the expansion of the cylinder. The hydrostatic test must be conducted in accordance with the test procedure described in DOT CFCC-13 (see Appendix A).

(2) A cylinder must be condemned if the elastic expansion exceeds the marked rejection elastic expansion. Repair of rejected cylinders is not authorized.

(3) Retest dates must be marked on a label securely affixed to the cylinder near the original test date and overcoated with epoxy.

(4) When a hydrostatic retest is repeated as provided for in § 173.34(e)(4), only two such retests are permitted.

c. OPERATIONAL CONTROLS -

(1) Cylinders may not be used for underwater breathing purposes.

(2) Cylinders used in oxygen service must conform with § 173.302(a)(5)(i) through (iv).

(3) A cylinder that has been subjected to fire may not be returned to service.

(4) Transportation of flammable gases is not authorized aboard aircraft or cargo vessel.

(5) Cylinders must be packaged in accordance with § 173.301(k).

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this exemption for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this exemption.

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b. A person who is not a holder of this exemption, but receives a package covered by this exemption, may reoffer it for transportation provided no modifications or changes are made to the package and it is offered for transportation in conformance with this exemption and the HMR.

c. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

d. Each packaging manufactured under the authority of this exemption must be marked with a registration symbol designated by the Office of Hazardous Materials Exemptions and Approvals for a specific manufacturing facility.

e. A current copy of this exemption must be maintained at each facility where the package is manufactured under this exemption. It must be made available to a DOT representative upon request.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo aircraft only, and passenger-carrying aircraft (see paragraph 7(c)(4) for restriction on flammable gases).
10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel or aircraft used to transport packages covered by this exemption. The shipper shall furnish a copy of this exemption to the air carrier before or at the time the shipment is tendered.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
 - o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, Parts 171-180.
 - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must also inform the AAHMS, in writing, as soon as practicable of any incidents involving the package and shipments made under this exemption.

Issued at Washington, D.C.



For Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

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(DATE)

Address all inquiries to: Associate Administrator for
Hazardous Materials Safety, Research and Special Programs
Administration, Department of Transportation, Washington, D.C.
20590. Attention: DHM-31.

The original of this exemption is on file at the above office.
Photo reproductions and legible reductions of this exemption
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prohibited.

Copies of exemptions may be obtained from the AAHMS, U.S.
Department of Transportation, 400 7th Street, S.W.,
Washington, DC 20590-0001, Attention: Records Center, 202-366-
5046.

PO: KFW